

ABSTRACT OF THE INVENTION

A method and system for modeling rooms or chambers in a structure for intuitive and accurate estimation of process parameters (e.g., material and labor costs for performing the process) associated with the rooms. A graphical user interface to an estimation program enables an estimator to insert a model of a room and thereafter morph and mold the model to approximate the room undergoing estimation. The model is represented as a polyhedron having a plurality of planes that may be assigned attributes such as floors, walls and ceilings. During the morphing process, the modified and other affected planes of the polyhedron are continually revised to maintain the integrity of the closed volume represented by the polyhedron. Upon completion of the morphing process of the model, the model may be queried by the estimator for performing estimations of target processes with the assigned attributes of the various planes intelligently returning areas and other parameters associated with the estimation polyhedron employed as an approximation of the room or chamber undergoing estimation.

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